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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Application Number: 10/605,447  
Filing Date: September 30, 2003  
Appellant(s): KOROVIN ET AL.

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Laura J. Zemen  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed August 18, 2008  
appealing from the Office action mailed January 08, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is  
contained in the brief.

**(2) Related Appeals and Interferences**

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The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

Claims 1-14 were cancelled without prejudice or disclaimer.

Claims 15-23 and 25 are pending in the application.

Claims 15-23 stand rejected under 35 U.S.C. § 103(a) and are appealed herein.

Claim 24 was cancelled without prejudice or disclaimer.

Claim 25 is withdrawn.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct. In the final rejection, it was incorrectly stated that claim 16 was rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al or Berman et al, each considered independently, in view of Berman et al and Zias et al(4,051,712), as applied in the rejection filed November 27, 2006. However, claim 16 was rejected in the office action filed November 27, 2006 as being

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unpatentable over Liu et al or Berman et al, each considered independently, in view of Zias et al(4,051,712). Furthermore, both Liu et al and Berman et al should have been modified with the teachings of the rotary union of Maloney et al, since clearly claim 16 depends from claim 15. Applicant's arguments clearly indicate that the intended rejection was understood.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4,051,712 A	Zias et al	10-1977
5,720,845 A	Liu et al	02-1998
5,980,361 A	Muller et al	11-1999
7,029,382 B2	Maloney et al	04-2006
2003/0211811 A1	Berman et al	11-2003

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 15,17,19-21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al(5,720,845) in view of Maloney et al(7,029,382), as applied in the office action mailed November 27, 2006.

Claims 15,17, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berman et al(2003/0211811) in view of Maloney et al(7,029,382), as applied in the office action mailed November 27, 2006.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al or Berman et al, each considered independently, in view of Zias et al(4,051,712), as applied in the office action mailed November 27, 2006.

Claims 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al in view of Maloney et al and further in view of Muller et al(5,980,361), as applied in the office action mailed January 08, 2008.

**(10) Response to Argument**

Appellant argues that the Examiner has not established a prima facie case of obvious. However, this statement is clearly incorrect as evidenced by the grounds of rejection and the following arguments.

Appellant argues that Maloney et al. fails to disclose a rotary union mounted on the carrier for connecting electrical lines to the pressure control system; Maloney et al. also fails to disclose a rotary union mounted to the carrier for connecting at least one pressure transducer with a control board; Appellant's use of the term "on" in Appellant's independent claim 15 is used as a function word to indicate position and contact with another surface; Appellant's independent claim 15 requires a rotary union mounted on the carrier, not a rotary union mounted on another item where the item is in turn mounted on the carrier; the Examiner contends that Appellant fails to recite that the rotary union is mounted directly to the carrier; however, Appellant's use of the phrase "mounted on said carrier" means exactly that and one of ordinary skill in the art would interpret a rotary union mounted on the carrier to mean that the rotary union is mounted on the carrier itself and not on another item located between

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the carrier and the rotary union; and further, Appellant's use of the word "to" in Appellant's independent claim 20 is used as a function word to indicate contact; accordingly, a rotary union mounted to a carrier defines a rotary union which is in contact with the carrier, not a rotary union that is mounted to another item where the other item is in turn mounted to the carrier. Appellant is attempting to take broad terminology, "on" and "to", and give them specific meaning. Clearly an element which is mounted on or to an item which is in turn mounted on or to a device is also mounted on or to the device. An example would be; a chair which is mounted on and/or to a support, the support being mounted on and/or to a floor; the chair is therefore also mounted on and/or to the floor, since it is attached to the support. Any English dictionary supports the Examiner's definition of "on" and "to". Appellant needs to further define the location of the rotary union in order to distinguish over the prior art.

Appellant argues that Liu describes a carrier in which the pressure on the wafer is applied by actuators with moving parts which are located on the workpiece carrier; in contrast, Appellant's invention does not utilize mechanically moving parts to apply pressure but instead applies pressure through air inflation of pressurizable zones; inlet valves 35 and exhaust valves 37 are utilized to control the pressure flow and pressure transducers 38 are coupled with the inlet valves and exhaust valves in order to control the inlet valves and exhaust valves; and therefore, the actuators used in Liu to provide downward force on the wafer would not have made it obvious to one of ordinary skill in the art to combine the teachings of Liu with

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the rotary union of Maloney to arrive at Appellant's claims. Maloney discloses the use of a rotary union in the exact same environment as Liu, that is a workpiece carrier, and therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the two references.

Appellant argues that Berman discloses a substrate carrier having a deformable surface for receiving a substrate and addressable transducers which apply pressure to pressurizable application zones; a controller can control the amount of force that the addressable transducers press with; in contrast, Maloney uses a completely different force to exert pressure on the workpiece; instead, Maloney utilizes pressurized pneumatic fluids to apply pressure to pressurizable zones; and therefore, it would not have been obvious to one of ordinary skill in the art to combine the transducers disclosed in Berman with the apparatus disclosed in Liu(the Examiner suspect the Appellant means Maloney here) to arrive at Appellant's claimed invention. However, Maloney discloses the use of a rotary union in the exact same environment as Berman, that is a workpiece carrier, and therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the two references.

Appellant argues that Zias et al falls to disclose a rotary union. However, Zias et al is not being used to disclose this feature.

Appellant argues that Muller fails to disclose a rotary union and therefore may not be combined with Liu. However, Muller is being cited to teach control valves for independently operating pressure

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chambers in the same environment as Liu, that is a workpiece carrier, for individually actuating different areas of a support plate 1, and therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have combined the teachings of Liu and Muller.

The Examiner contends that Appellant has not adequately described exactly how the rotary union of Maloney can be considered to not be mounted on and/or to the carrier, and exactly how the prior art, all of which teach workpiece carriers, is not combinable.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Timothy V Eley/

Primary Examiner, Art Unit 3724

Conferees:

/Boyer D. Ashley/

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/Joseph J. Hail, III/

Supervisory Patent Examiner, Art Unit 3723